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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DOUGLAS B. WILSON

Appeal 2009-005608
Application 10/720,821
Technology Center 3600

Decided: August 31, 2009

Before LINDA E. HORNER, JOHN C. KERINS, and MICHAEL W.
O'NEILL, *Administrative Patent Judges*.

O'NEILL, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Douglas B. Wilson (Appellant) seeks our review under 35 U.S.C. § 134 of the final rejection of claims 20-28. We have jurisdiction under 35 U.S.C. § 6(b) (2002). Appellant's counsel presented oral arguments on August 13, 2009.

THE INVENTION

The invention is to a hand and arm rest or support that prevents or lessens the amount of fatigue that occurs in the hand and arms from driving or steering a vehicle or vessel over an extended period.

Claim 20, reproduced below, is representative of the subject matter on appeal.

20. A fatigue relieving/preventing apparatus associated with a steering wheel for controlling a vehicle comprising:

a first section that connects to a peripheral portion of the steering wheel; and

a second section that connects to, and extends from, the first section at the peripheral portion of the steering wheel, the second section extends from the first section outward at an angle to a plane across a face to the steering wheel, the second section for supporting at least a portion of a vehicular operator's body when pressure from the portion of the vehicular operator's body on the second section is less than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel, and *deforming out of interference with the vehicular operator's ability to operate the steering wheel when pressure from the portion of the vehicular operator's body on the second*

section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel.

(App. Br., Claims App'x.; emphasis added.)

THE PRIOR ART

The Examiner relies upon the following as evidence of unpatentability:

Laubach	US 1,575,848	Mar. 9, 1926
Van Arsdel	US 2,118,540	May 24, 1938
Anson	US 2,134,020	Oct. 25, 1938

THE REJECTIONS

The following Examiner's rejections are before us for review:

Claims 20-26 and 28/20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Van Arsdel.

Claims 20-26 and 28/20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Anson.

Claims 20, 27, 28/20, and 28/27 are rejected under 35 U.S.C. § 102(b) as being anticipated by Laubach.

SUMMARY OF DECISION

We AFFIRM-IN-PART.

ISSUES

The issues before us are:

Whether the Appellant has demonstrated error in the Examiner's rejection of claims 20-26 and 28/20 as being anticipated by Van Arsdel. This issue turns on whether the Appellant has shown that the Examiner erred in finding that, because Van Arsdel explicitly discloses that the driver may remove and then reattach in another location the grip rest, this operation reads on the capability of the claimed second section to deform out of interference with the vehicular operator's ability to operate the steering wheel when the pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel.

Whether the Appellant has demonstrated error in the Examiner's rejection of claims 20-26 and 28/20 as being anticipated by Anson. This issue turns on whether the Appellant has shown that the Examiner erred in finding that Anson's explicit disclosure that the grip portion being made from a pliable and semi-rigid material permits this structure to read on the capability of the claimed second section to deform out of interference with the vehicular operator's ability to operate the steering wheel when the pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel.

Whether the Appellant has demonstrated error in the Examiner's rejection of 20, 27, 28/20, and 28/27 as being anticipated by Laubach. This issue turns on whether the Appellant has shown that the Examiner erred in finding that, because a vehicle operator could unscrew Laubach's knobs and fasten the knobs to another position, this permits this structure to read on capability of the claimed second section to deform out of interference with the vehicular operator's ability to operate the steering wheel when the pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel.

FINDINGS OF FACT

We find that the following enumerated findings of fact are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. The Appellant does not contest the Examiner's finding that Van Arsdel, Anson, and Laubach disclose a first section that connects to a peripheral portion of a steering wheel. App. Br. and Reply Br., *passim*.
2. The Appellant does not contest the Examiner's finding that Van Arsdel, Anson, and Laubach disclose a second section that connects to, and extends from, the first section. App. Br. and Reply Br., *passim*.

3. The Appellant does not contest the Examiner's finding that Anson's, and Laubach's second section is for supporting a portion of a vehicular operator's body when pressure from the operator's body portion is less than the pressure needed to deform the second section. App. Br. and Reply Br., *passim*. Van Arsdel discloses as its objective to provide a second section (grip-rest 2)¹ to an automobile steering wheel which will support the thumb and fingers and keep the hand in a proper steering position (comfortable for his thumb and fingers and which will keep the hand in a proper steering position). (Page 1, left column, lines 1-5). Additionally, Van Arsdel discloses that

[t]he weight of the hand and arm are comfortably supported with the bottom of the hand resting in the concavity of the grip-rest ... or with the ball of the thumb seated in the concavity as shown [in the figure] ... and the two operational positions afford opportunity for change which will keep the hand and arm from the cramp or strain from long driving.

(Page 1, right column, lines 41-48). A device that has as its objective and is disclosed to comfortably support the hand and arm would not deform under pressure that is needed to deform such an device. As such, we find that Van Arsdel explicitly disclose its second section (grip-rest 2) is for supporting a portion of a vehicular operator's body when pressure from the operator's body portion is less than the pressure needed to deform the second section.

4. As such, we find that each of Van Arsdel, Anson, and Laubach, explicitly discloses

¹ Parenthetical nomenclature, Van Arsdel.

[a] fatigue relieving/preventing apparatus associated with a steering wheel for controlling a vehicle comprising: a first section that connects to a peripheral portion of the steering wheel; and a second section that connects to, and extends from, the first section at the peripheral portion of the steering wheel, ... the second section for supporting at least a portion of a vehicular operator's body when pressure from the portion of the vehicular operator's body on the second section is less than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel . . .

See Claim 20, supra.

Van Arsdel

5. The Examiner finds from Van Arsdel's disclosure (page 1, right column at line 49 to page 2, left column at line 2 and at lines 28-32) that the grip-rest 2 is adjustable. Lines 28-32 explain that loosening or reversing the screw 14 sufficiently permits the grip-rest 2 to shift position. From this disclosure, the Examiner finds the grip-rest 2 could be placed at a position where it does not interfere with the operation of the steering wheel (*see Ans. 9-10*). As such, the Examiner finds that Van Arsdel's grip-rest 2 has the capability of deforming out of interference with the vehicular operator's body when the pressure from the vehicular operator's body is equal to or greater than the pressure needed to deform the second section out of interference.
6. The Appellant argues that the portion of Van Arsdel's disclosure that the Examiner is using (Van Arsdel, page 2, left column at lines 28-32)

to find that Van Arsdel's grip-rest 2 is deformable does not in fact support the Examiner's finding. Instead, this portion of Van Arsdel supports a finding that to move the grip-rest 2, the screw 14 must be loosened, the rest repositioned, and screw 14 tightened. The Appellant argues that this operation is not deforming according to claim 20 during normal use of the second section (grip-rest) (parenthetical nomenclature to Van Arsdel). The Appellant argues, instead, once positioned, the grip-rest is fixed. App. Br. 8.

7. The Appellant argues, further, that based on Van Arsdel's disclosure at page 1, right column, lines 22-28, reproduced below,

These flanges 4 and 5 enable the operator instantly to feel any deviation of the car from a straight course and gives him something substantial to push against in resistance and also in rotating the wheel to steer the car around corners and curves and away from obstructions or bad places in the roadway.

supports the position that the grip-rest 2 of Van Arsdel does not deform according to claim 20 when pressure is applied to it. App. Br. 8. *See also* Reply Br. 5-6.

Anson

8. The Examiner finds that Anson's grip portion 11 is constructed from a pliable and semi-rigid composition. *See* Ans. 5 and Anson, page 1, right column lines 5-24, page 2, right column 25-40. As such, the Examiner finds Anson's steering wheel attachment is capable of deforming out of interference with the vehicular operator's ability to operate the steering wheel when the pressure applied is greater than or equal to the pressure needed to deform the attachment while the

vehicular operator is operating the steering wheel. Ans. 5 and 10. An article of manufacture made from a pliable and semi-rigid composition, *e.g.*, rubber, would inherently have a capability to deform out of interference.

9. The Appellant cites to Anson, page 1, left column, lines 6-25 and right column, line 49 to page 2, left column line 18, to counter the Examiner's findings. Appellant then argues, based on the citation and quoted Anson passages:

when the Anson handgrip is in use, it is in the pendant position below the steering wheel and is used to steer the vehicle. If, during normal operations, the driver were to grab the steering wheel in an emergency situation, he would release the handgrip and grab the wheel, for example, at the 10 and 2 o'clock positions. In doing so, the pendant-hanging handgrip would not be deformed as set forth in claim 20 because it would not be in use at all.

App. Br. 10.

10. In responding to the Examiner's finding that movement of the steering wheel attachment provides further reason to find the attachment is capable of deforming out of interference, the Appellant argues:

when the handgrip is moved to the top, it is moved there to be placed purposefully out of use all the time. If the handgrip is moved to the top of the steering wheel, as suggested by the Examiner, it would be awkward and dangerous to use for driving because the driver's hands would be disposed through the steering wheel. In this position, it also would not provide any of the

benefits recited in Anson to relieve fatigue in the arms and hands of the driver. In order to move the handgrip, it would be understood that the vehicle would have to be stopped, the handgrip detached and repositioned at the top, and reattached.

App. Br. 10.

Laubach

11. The Examiner finds that portion 10 is capable of deforming out of interference because the driver can unscrew Laubach's knobs and move them to another position as desired by the driver. Ans. 12.
12. The Appellant argues that:

The description of the knobs and a review of the Figures makes plain that the knobs are not deformable and they are not disposed at an angle with respect to the plane across the face of the steering wheel. The knobs are rigidly connected to the steering wheel by screws 5. Any movement of them requires removing the screws, drilling the wheel at a new location, and reattaching the knobs at the new location. At this new location, the knobs will be in a plane parallel to the plane across the face of the steering wheel.

The knobs do not deform out of interference with the operation of the steering wheel as does the second section of claim 20. In fact, once the Laubach knobs are secured by screws 5 as shown and described, they are fixed and not movable during normal operations. If they are not unscrewed, the only movement would be to apply a destructive force to the knobs, thereby breaking them. Moreover, if the driver were to attempt to grab the steering wheel at the locations of the knobs in an emergency, the knobs would not deform and would prevent the driver from

grabbing the wheel at these knob locations. Therefore, Laubach does not support a *prima facie* basis of anticipation because it is missing at least one element of claim 20 relating to deformation of the knobs out of interference with the operation of the steering wheel in the normal operation of the knobs.

See e.g., page 1, lines 43-71. App. Br. 11-12.

PRINCIPLES OF LAW

A single prior art reference that discloses, either expressly or inherently, each limitation of a claim invalidates that claim by anticipation. *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565 (Fed. Cir. 1992). Thus, a prior art reference without express reference to a claim limitation may nonetheless anticipate by inherency. *See In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349 (Fed. Cir. 2002).

“A patent applicant is free to recite features of an apparatus either structurally or functionally. *See In re Swinehart*, 439 F.2d 210, 212 (CCPA 1971) (“[T]here is nothing intrinsically wrong with [defining something by what it does rather than what it is] in drafting patent claims.”). Yet, choosing to define an element functionally, *i.e.*, by what it does, carries with it a risk.” *In re Schreiber*, 128 F.3d 1473, 1478 (Fed. Cir. 1997). As stated in *Swinehart*, 439 F.2d at 213:

. . . where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of

the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

ANALYSIS

Appellant does not separately argue the claims in each ground of rejection. *See App. Br. 6-12.* We select independent claim 20 as the representative claim for deciding whether the Appellant has demonstrated error in the rejections set forth by the Examiner. *See 37 C.F.R. § 41.37(c)(1)(vii) (2008).* Accordingly, the dependent claims also rejected under each ground of rejection will stand or fall with claim 20 for each rejection.

We find that the prior art used by the Examiner explicitly discloses a fatigue relieving/preventing apparatus associated with a steering wheel for controlling a vehicle comprising a first section that connects to a peripheral portion of the steering wheel and a second section that connects to, and extends from, the first section at the peripheral portion of the steering wheel, where the second section is for supporting at least a portion of a vehicular operator's body when pressure from the portion of the vehicular operator's body on the second section is less than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel. See Facts 1-4. The issue becomes whether the Appellant has shown error in the Examiner's finding that structures explicitly described in the prior art can satisfy the functional aspect of the second section being able to deform out of interference with the vehicular operator's

ability to operate the steering wheel when the pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel. Below we address whether the Appellant has shown error in the Examiner's rejection with respect to this issue for each piece of prior art.

Anticipation with Van Arsdel

We conclude that Appellant has met his burden in showing that Van Arsdel's second section is not capable of deforming out of interference with the vehicular operator's ability to operate the steering wheel when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel. As the Appellant has stated, Van Arsdel's second section (grip rest) needs to be repositioned in order to be moved to a position out of interference with a driver's ability to steer the steering wheel (Fact 6) and parts of the second section (the flanges 4 and 5) give the driver something to push against to steer the car around corners and curves (Fact 7). A structure, as the Examiner has found, *see* Fact 5, that requires disassembly and reassembly and permits the driver to push against cannot reasonably be considered a structure that is capable of deforming out of interference as has been claimed. Accordingly, Appellant has met his burden in showing that Van Arsdel's structure is not capable of performing the deformation out of interference function claimed. Thus, Appellant has demonstrated error in the Examiner's rejection of claims 20-26 and 28/20.

Anticipation with Anson

We conclude that Appellant has not met his burden in showing that Anson's second section is not capable of deforming out of interference with the vehicular operator's ability to operate the steering wheel when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel. The Examiner has clearly found that Anson prefers to use a pliable and semi-rigid composition to form the grip portion 11 that the Examiner is utilizing to read on the second structural aspect. *See Fact 8.* An article of manufacture made from a pliable and semi-rigid composition, *e.g.*, rubber, would inherently have a capability to deform out of interference. *See id.* The amount of deformation out of interference would be dependent upon the resilience property of the cured rubber and not its form. Appellant tries to show Anson does not inherently possess the characteristic of deforming out of interference because the grip would either not be used in operation (Fact 9), would be dangerous to operate, or would not achieve the recited benefits (Fact 10). Neither argument outweighs the explicit disclosure that Anson's device is manufactured from a material that is pliable and semi-rigid and thus would have an inherent property of being deformable. In this case, the Examiner has good reason (Fact 8) to believe that the functional limitation (deforming out of interference) asserted to be critical in establishing novelty in the claimed subject matter, may, in fact, be an inherent characteristic of Anson's steering attachment. In such a case, the Appellant must provide evidence that Anson's steering attachment is not capable of deforming out of

interference. *See Swinehart*, 439 F.2d at 212. Arguments that focus on a particular envisioned use of a device in a particular driving condition is not evidence that the device is not inherently capable of deforming out of interference. As such, Appellant has not met his burden of showing Anson's steering attachment is not capable of deforming out of interference as set forth in claim 20. Claims 20-26 and 28/20 fall with claim 20.

Anticipation with Laubach

We conclude that Appellant has met his burden in showing that Laubach's second section does not inherently possess the characteristic of being capable of deforming out of interference with the vehicular operator's ability to operate the steering wheel when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel. As Appellant argues, in the manner in which the Examiner has utilized Laubach in order to reach the deforming out of interference function, the knobs need to be disassembled and reassembled in order to be repositioned. *See* Facts 11 and 12. We agree with Appellant that the disassembly and reassembly of the knobs demonstrates that the knobs are fixed and the only manner of movement to the knobs, short of disassembly, would be destructive in nature to Laubach's device. As such, to find that the functional limitation of the second section deforming out of interference, as set forth in claim 20, is inherently satisfied on a manner of movement that either requires disassembly and reassembly or is destructive is unreasonable. Accordingly, the Appellant has met his burden in showing that Laubach does not possess

the capability of deforming as set forth in claim 20. Thus, Appellant has demonstrated error in the Examiner's rejection of claims 20, 27, 28/20, and 28/27.

CONCLUSIONS

Appellant has met his burden of showing that the structures in Van Arsdel and Laubach are not capable of deforming out of interference with the vehicular operator's ability to operate the steering wheel when the pressure from the portion of the vehicular operator's body on the second is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel.

Appellant has not met his burden of showing that the steering wheel attachment disclosed in Anson is not capable of deforming out of interference with the vehicular operator's ability to operate the steering wheel when the pressure from the portion of the vehicular operator's body on the second is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel.

DECISION

The Examiner's decision to reject claims 20-26 and 28/20 as being anticipated by Van Arsdel is reversed.

The Examiner's decision to reject claims 20-26 and 28/20 as being anticipated by Anson is affirmed.

The Examiner's decision to reject claims 20, 27, 28/20, and 28/27 as being anticipated by Laubach is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

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